

Title (en)
BARRIER FILM, WAVELENGTH CONVERSION SHEET USING BARRIER FILM, AND DISPLAY DEVICE USING WAVELENGTH CONVERSION SHEET

Title (de)
SPERRFILM, WELLENLÄNGENKONVERSIONSFOLIE UND ANZEIGEVORRICHTUNG MIT WELLENLÄNGENKONVERSIONSFOLIE

Title (fr)
FILM BARRIÈRE, FEUILLE DE CONVERSION DE LONGUEUR D'ONDE AU MOYEN DU FILM BARRIÈRE ET DISPOSITIF D'AFFICHAGE FAISANT APPEL À UNE FEUILLE DE CONVERSION DE LONGUEUR D'ONDE

Publication
EP 3970969 C0 20230906 (EN)

Application
EP 20806329 A 20200512

Priority
• JP 2019090703 A 20190513
• JP 2019090704 A 20190513
• JP 2020018974 W 20200512

Abstract (en)
[origin: EP3970969A1] Provided is a barrier film for a wavelength conversion sheet, which can effectively suppress adhering of a light guide plate to the wavelength conversion sheet and suppresses damaging of a wavelength conversion sheet, a light guide plate, a diffusion plate, etc. A barrier film 1 is a multilayer film which includes at least a barrier layer 13 and base material layers 12, 15. The barrier film 1 has stacked on one surface thereof a mat layer 16 including a resin 161 and fillers 162 which at least partially project from the mat layer. In a plan view of the mat layer 16, the proportion of the fillers 162 that are among the fillers 162 projecting from the mat layer 16 and that are viewed as having a particle size at least twice as large as the thickness of the mat layer 16 is 20-80% of the total amount of the fillers 162 projecting from the mat layer 16, and the total number of fillers 162 in a square of 1 mm² in the plan view of the mat layer 16 is 1800 or more.

IPC 8 full level
B32B 27/20 (2006.01); **C08J 5/18** (2006.01); **F21S 2/00** (2016.01); **G02B 5/02** (2006.01); **H01L 33/00** (2010.01); **H01L 33/50** (2010.01); **F21Y 115/10** (2016.01)

CPC (source: EP KR US)
B32B 7/023 (2019.01 - KR); **B32B 7/12** (2013.01 - EP); **B32B 27/08** (2013.01 - EP); **B32B 27/20** (2013.01 - KR); **B32B 27/281** (2013.01 - EP); **B32B 27/286** (2013.01 - EP); **B32B 27/304** (2013.01 - EP); **B32B 27/306** (2013.01 - EP); **B32B 27/32** (2013.01 - EP); **B32B 27/36** (2013.01 - EP); **C08J 5/18** (2013.01 - EP US); **C08J 7/0423** (2020.01 - US); **F21S 2/00** (2013.01 - KR); **G02B 5/02** (2013.01 - KR); **G02B 5/0242** (2013.01 - EP); **G02F 1/133603** (2013.01 - US); **G02F 1/133605** (2013.01 - US); **G02F 1/133607** (2021.01 - US); **H01L 33/00** (2013.01 - KR); **H01L 33/50** (2013.01 - KR); **H01L 33/502** (2013.01 - US); **H01L 33/505** (2013.01 - US); **B32B 2255/10** (2013.01 - EP); **B32B 2255/20** (2013.01 - EP); **B32B 2255/26** (2013.01 - EP); **B32B 2307/412** (2013.01 - EP); **B32B 2457/202** (2013.01 - EP); **B82Y 20/00** (2013.01 - EP); **C08J 2329/04** (2013.01 - US); **H01L 33/507** (2013.01 - EP)

Cited by
US12025882B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
EP 3970969 A1 20220323; **EP 3970969 A4 20230201**; **EP 3970969 B1 20230906**; **EP 3970969 C0 20230906**; CN 113825641 A 20211221; CN 113825641 B 20231031; ES 2955486 T3 20231201; JP 2021112915 A 20210805; JP 6874918 B2 20210519; JP 7120378 B2 20220817; JP WO2020230783 A1 20210520; KR 20220007614 A 20220118; TW 202120971 A 20210601; TW I830915 B 20240201; US 2022216379 A1 20220707; WO 2020230783 A1 20201119

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EP 20806329 A 20200512; CN 202080034390 A 20200512; ES 20806329 T 20200512; JP 2020018974 W 20200512; JP 2020558990 A 20200512; JP 2021069520 A 20210416; KR 20217037269 A 20200512; TW 109115857 A 20200513; US 202017595115 A 20200512